(functional and organizational relationships, display hierarchy)

27. The computer system of claim 18 wherein there are a plurality of objects represented in the object hierarchy and wherein the relationships between objects represented in the object hierarchy include functional relationships and organizational relationships between

5   certain of the objects represented in the object hierarchy; and

wherein when the resource management process causes the computer system to perform the operation of displaying at least one representation of the object on a graphical user interface, the resource management process causes the computer system to perform the operation of displaying the object hierarchy on the graphical user interface to

10   convey the functional and organizational relationships between resources in the computing system environment.

(storage, computer and SAN resources, user can manage via gui)

28. The computer system of claim 27 wherein:

15   the plurality of objects represented in the object hierarchy represent resources in the computing system environment including storage system resources, computing system resources, and storage area network resources coupled to the computer system and operating in communication with the resource management process via a network interface;

20   wherein a user of the graphical user interface can manage resources associated with object in the object hierarchy via selection of representations of objects in the object hierarchy displayed on the graphical user interface; and

wherein all objects containing a representation in the graphical user interface have a simple name and a home that combine to define a single name space for all objects in

25   the computing system environment irrespective of what those objects represent.

(object appears in more than one location in hierarchy, use qualified if non-home context)

29. The computer system of claim 18 wherein there are multiple representations of the same object within the object hierarchy in the memory system and on the graphical user

30   interface and wherein representations of the object that appear in a non-home context in

the graphical user interface are displayed in the graphical user interface in a fully qualified manner so as to indicate the simple name of the object followed by the home of the object.

5   (moving and possibly renaming)

30. The computer system of claim 18 wherein the resource management process further causes the computer system to perform the operations of:

    moving the object to a new home location in the object hierarchy such that the object has a new home context; and

10   determining if the simple name for the object uniquely identifies the object in the new home context for the object with respect to other object having the same home context, and if the simple name for the object does not uniquely identify the object in the new home context for the object, altering the simple name to provide a unique simple name for the object in the new home context.

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31. The computer system of claim 30 wherein when the resource management process causes the computer system to perform the operation of altering, the resource management process causes the computer system to perform the operation of appending a suffix to the end of the simple name of the object such that the simple name uniquely

20   identifies the object in the new home context.

32. The computer system of claim 17 wherein the object can be represented on the graphical user interface in a fully qualified manner to indicate a specific instance of the resource associated with that object by representing the object with the simple name of

25   the object followed by the home of the object.

33. A computer program product having a computer-readable medium including computer program logic encoded thereon that, when executed on a computer system having a coupling of a memory system, a processor, and a display that displays a

30   graphical user interface, the computer program logic is executed on the processor, and the

computer program logic provides a method for representing resource in a computing system environment by causing the processor to perform the operations of:

creating an object in the memory system to represent a resource in the computing system environment;

5   assigning an object identifier to the object in the memory system, the object identifier including at least a simple name of the object and a home of the object;

displaying at least one representation of the object on the graphical user interface on the display of the computer system, each of the at least one representation of the object including the simple name of the object; and

10   wherein if a home condition exists for one of the at least one representation of the object displayed on the graphical user interface, the representation of the one of the at least one representation of the object further includes the home of the object displayed on the graphical user interface, and if a home condition does not exist, the representation of the one of the at least one representation of the object displayed on the graphical user

15   interface does not include the home of the object.

34. A computer system, comprising:

a display;

a memory system;

20   a processor; and

an interconnection mechanism connecting the display, the processor and the memory system;

wherein the memory system is encoded with a resource management application that when performed on the processor, produces a resource management process that

25   includes a graphical user interface for representing a resource in a computing system environment on the display of the computer system, the resource management process configuring the computer system with:

means for creating an object in the memory system to represent a resource in the computing system environment;